

# **RFCA Stakeholder Focus Group**

## **May 9, 2001**

### **Meeting Minutes**

#### **INTRODUCTION AND ADMINISTRATIVE**

A participants list for the May 9, 2001 Rocky Flats Cleanup Agreement (RFCA) Stakeholder Focus Group meeting is included in this report as Appendix A.

Reed Hodgins of AlphaTRAC, Inc., meeting facilitator, reviewed the purpose of the RFCA Focus Group. Then he went over the meeting rules. Introductions were made.

Reed then asked if there were any questions or comments regarding the April 25, 2001 meeting minutes. Page 8 of the meeting minutes has Jerry Henderson stating the Task 1 report "answers a lot of questions but raises two big ones... [multi-tiers and RSALs]." Jerry noted that it should read "[multi-tiers and ALARA]." The change will be noted and the revised meeting minutes will be posted on the U.S. Department of Energy's (DOE) Rocky Flats Environmental Technology Site (RFETS) website.

Reed reviewed the meeting rules.

Reed reviewed the meeting agenda, which included:

- Radiological Soil Action Levels (RSALs) Working Group Workshop Update
- RSAL Workshop – Outcomes and Issues
- Health Effects Workshop Update
- Task 4 – New Science Summary and Discussion
- End State Management Discussion (Continued) – Post-closure Options
- Set Future Agendas and Review Meeting

#### **RSAL WORKING GROUP WORKSHOP UPDATE**

Reed listed objectives for the discussion:

- Identify key outcomes from the workshop
- Identify issues that should be addressed by the Focus Group

**ADMIN RECORD**

SW-A-006540

1/52

Tim Rehder, U.S. Environmental Protection Agency (EPA), updated the Focus Group on RSAL Working Group activities.

Tim discussed three issues of interest from the workshop and other Working Group discussions:

- Air mass loading,
- Comparison between RESRAD 6.0 and RESRAD as used by RAC, and
- The RAGS risk model.

The RSAL Working Group will be addressing the air mass loading factor in more depth. They are considering gathering more monitoring data from burned areas, including a prescribed burn recently conducted in a Boulder Open Space. They may also examine historical air monitoring data from Rocky Flats to evaluate the effects of summertime microbursts.

The Working Group may also further develop its comparison between RESRAD 6.0 and RESRAD as used by RAC. Early results indicate that differences in the modeling approaches have minor impacts on results compared to the choices in input values.

Tim also discussed the RAGS risk model with the group. In response to questions from the Focus Group, Tim summarized some key characteristics of the RAGS model:

- RAGS model is a simpler approach than RESRAD,
- RAGS calculates lifetime risk and can not evaluate annual doses (dose calculations would be exclusively determined using RESRAD),
- RAGS uses separate slope factors for different radionuclides and exposure pathways,
- RAGS produces an independent set of results which are not incorporated in or combined with RESRAD.

Tim committed to provide information on the RAGs methodology and its theory in the next Focus Group packet. Members of the Focus Group asked for a presentation and discussion on RAGS. Reed agreed to take the request to the Agenda Group.

It was noted in a separate comment that the Governor had signed the Environmental Covenants Bill on April 20, 2001.

## RSAL WORKSHOP – OUTCOMES AND ISSUES

Jerry Henderson, John Marler, and Ken Korkia handed out summary reports regarding the April 27 and 28, 2001 RSALs Workshop (Appendices B, C, and D, respectively).

John Marler summarized some key issues identified at the workshop:

- Mass Loading,
  - How to model fires,
  - Should probability of fire be set to 1?
  - Turbulence at Rocky Flats,
- Historical data on prescribed burns at the 903 Pad,
- Changing dose conversion factors (especially ICRP 67 or 72 versus ICRP 26 or 30),
- The need for comprehensive understanding of the model and its sensitivities to inputs,
- The importance of rigorously determined site-specific input values,
- The groundwater pathway – is it important, how should it be treated?

The discussion was opened up to the Focus Group, which identified additional key issues from the Workshop:

- The benchmarking of RESRAD 6.0 (more information about and confirmation of the Nuclear Regulatory Commission's benchmarking desired),
- Options for treatment of the air pathway,
- The uncertainty in model results,
- The availability of site-specific data to develop input parameters for air pathway, soil ingestion, and food and vegetable ingestion,
- The dispersion factor for plutonium and americium in groundwater,
- The potential use of multiple tiers.

The Focus Group discussed these issues and determined five key topics that should be addressed further by the Focus Group:

- Ground Water,
- RAGS Model,
- Tiers,
- Parameters,
- Fires.

Reed stated that the schedule for discussing these issues would be developed by the Agenda Group.

## **HEALTH EFFECTS WORKSHOP UPDATE**

Mary Harlow briefed the Focus Group on the status of the Health Effects Workshop being planned by members of the community. She stated that the Rocky Flats Coalition of Local Governments had agreed to organize the workshop. She also noted that a planning meeting would be held during the next week and that all interested parties are invited. Reed noted that a similar workshop had been held at Brookhaven National Laboratory and offered to provide information to the planning group.

## **TASK 4 – NEW SCIENCE SUMMARY AND DISCUSSION**

Reed listed three objectives for the discussion of the New Science report:

- Identify any New Science issues missed in the review,
- Identify/address any remaining knowledge questions,
- Reach closure on the Focus Group discussion of new science

Carol Lyons introduced the topic for the Focus Group. She reminded the Focus Group that the goal of Task 4 is to evaluate new scientific information since 1998 that might impact the RSAL review. The next important question is how will that new information impact the RSAL? She noted that the point of the discussion in today's meeting is to ask ourselves the questions:

- Is there new science pertinent to this task that was missed?
- Is there anything that was overlooked that needs to be in this task?
- Based on the new information that we do know about, what questions need to be answered about the new science to make it understandable to us so that we can then go to the question that is Task 3; how is the new science applied to the RSAL review?

John Rampe then presented a briefing on the results of Task 4 (Appendix E).

In response to a question from a member of the Focus Group, John indicated that the Task 4 report was a product of the RSAL Working Group, and that Sandi MacLeod was the lead in preparing the report.

Following John's presentation, the Focus Group held a discussion looking for other new science that could be pertinent to the RSAL setting process. The following topics were brought forward:

- The smoke released and subsequent dust resuspension associated with major wildfires at DOE sites during the summer of 2000,
- Recent studies, including those at the Nevada Test Site, on transport of plutonium in a colloidal suspension form,
- A study from the Colorado Climate Center that may have a bearing on mass loading,
- Studies on legacy plutonium deposition in the Walnut Creek drainage,
- Studies by the Colorado Department of Public Health and Environment regarding speciation of uranium at Rocky Flats,
- Information on americium vs. plutonium distributions, especially where americium is found unassociated with plutonium (this may be a parameter issue rather than a new science issue),
- The health study on exposures to Rocky Flats workers,
- Historical information on exceedances at RFETS air quality monitoring stations,
- A report prepared by John Till on uncertainty in risk coefficients.

The agencies agreed to examine these issues and revise the Task 4 report accordingly.

## END STATE MANAGEMENT DISCUSSION (CONTINUED) – POST-CLOSURE OPTIONS

Reed noted that this topic was a continuation of the presentation and discussion on post-closure options that was begun at the April 25, 2001 focus Group meeting. He listed objectives for the discussion:

- Complete the overview of post-closure options
- Determine issues to address and a path forward for the end state discussion

John Rampe completed the briefing on post-closure options that he began at the Focus Group meeting on April 25, 2001 (Appendix F).

John summarized the previous discussion by stating that some contamination would remain at Rocky Flats after cleanup is completed. The question to be addressed is how much will remain and in what form. How can a holistic decision be made for all media that is the best overall? He noted that the decisions would have to work within limitations.

John next discussed surface water and options for protecting the surface water standard. He discussed the issues of changing standards, where to monitor against the standard, and how to collect samples. He discussed the configuration of the final water management system.

John next summarized options for sub-surface soils. He indicated that the primary focus of the sub-surface cleanup would be in the industrial area – and that there are a number of unknowns still there. The main purpose of sub-surface cleanup will be to protect water quality.

A question was asked about gamma radiation from sub-surface contamination. The answer was that the gamma radiation from americium is low level and easily blocked by surrounding soil.



John indicated that another option is different cleanup levels for different depths.

A discussion of stewardship implications followed. It was noted that DOE would still own (be responsible for) the remaining contamination after cleanup was over. A question was posed about what kind of presence DOE would maintain and how confident the community would be in that presence continuing.

This led to a discussion of the CERCLA post-closure process and how that would need to be tailored for Rocky Flats. For example, would the five-year review identified in CERCLA be adequate?

The issue of long-term information management during stewardship was discussed. How and where the information could be retained and available for hundreds of years was seen as an important issue to address. The possibility of needing a "nuclear priesthood" to watch over the records for thousands of years was mentioned.

A discussion of the viability of engineered and institutional controls over long periods of time was discussed. Several members raised concerns that there is little evidence that such controls will be effective for more than a few decades.

An example of an engineered control at Rocky Flats was discussed. The Shattuck site in Denver was discussed, both as a case of failed engineered controls and success of the CERCLA five-year review process.

The group then discussed the issue of what soil contamination level is below concern. The discussion was primarily framed around the existing two-tier RSAL, where soil contaminated above Tier 1 is definitely remediated, soil contaminated below Tier 2 can definitely be left in or returned to the ground, and soil contaminated between Tier 2 and Tier 1 must be evaluated. The "free release" criterion for surface contaminated objects was brought up as a model. The group discussed the issue further and decided that the issue should be addressed from the standpoint of tiers and ALARA.

It was noted by a member of the Focus Group that there were important top-level issues that needed to be addressed, and urged the group to stay at this level. Examples given included: How do we measure water quality? Where do we measure water quality?

What do we do about subsurface contamination? Why does it cost so much to send our waste to another DOE facility?

It was noted that some way of identifying cost savings and applying them to prioritized environmental restoration needs should be developed.

DOE indicated that a decision matrix could be developed that relates resources to alternatives. Such a matrix would help the community and agencies evaluate options and make the best holistic choice for use of available funds and resources.

Several members of the Focus Group noted that such a matrix was needed – comparing cost and schedule for a number of options.

The issue of operating contract modification was discussed. It was noted that a changing regulatory framework (such as a new RSAL) could require changes to Kaiser-Hill's contract.

The process of dispute resolution if disagreement among the agencies occurred was briefly discussed.

The discussion moved to a dialog on the cost of closing Rocky Flats and the relation of D&D costs to remediation funding. A concern was raised that overruns in D&D costs could reduce the funding available for remediation. It was also questioned whether cost savings in the D&D program could be funneled to remediation, or would all such savings go to fee for Kaiser-Hill and cleanup at other DOE sites.

The Focus Group decided that a better understanding of the costs associated with closure and the uncertainty in the budget would be useful in understanding the potential for lower or higher remediation funding. Kaiser-Hill offered to bring in Alan Parker to brief the group on the baseline budget and its uncertainties.

Reed summarized the actions from the discussion: get a briefing on cost projections and design the comparison matrix.

The group discussed how to develop the matrix without slowing the discussion. It was suggested to design the matrix, and then fill it in as the end state discussion proceeds. It was cautioned that this discussion must not impact completing the RSAL dialog.

In further discussion of the cost issue, the Focus Group decided to address three case studies in order to get a better feel for the topic. Waste disposal was chosen as the first topic.

The group also felt it important to begin addressing how to effect cost savings in other areas of closure and move the savings into remediation.

## **NEXT MEETING AGENDA**

Reed presented the topics for upcoming meetings to the Focus Group. He indicated that the Agenda Group would meet and craft a new schedule of topics in response to the results of today's meeting.

## **ADJOURNMENT**

The meeting was adjourned at 6:40 p.m.

**RFCA Stakeholder Focus Group**  
**May 9, 2001**  
**Meeting Minutes**

**Appendix A**  
**Participants List**

**RFCA Stakeholder Focus Group  
May 9, 2001  
Meeting Minutes**

**Appendix B  
John Marler, Rocky Flats Coalition of Local Governments:  
Workshop Feedback**

**RFCA Stakeholder Focus Group  
May 9, 2001  
Meeting Minutes**

**Appendix C**

**Jerry Henderson, Rocky Flats Citizen's Advisory Board:  
Stakeholder Workshop – Outcomes and Issues, Suggestions  
from the Panel of Experts**

**RFCA Stakeholder Focus Group  
May 9, 2001  
Meeting Minutes**

**Appendix D  
Ken Korkia, Rocky Flats Citizen's Advisory Board: Stakeholder  
Workshop Summary**

**RFCA Stakeholder Focus Group**  
**May 9, 2001**  
**Meeting Minutes**

**Appendix E**  
**John Rampe, U.S. Department of Energy:**  
**RSALs Task 4, New Scientific Information**



**RFCA Stakeholder Focus Group  
May 9, 2001  
Meeting Minutes**

**Appendix F  
John Rampe, U.S. Department of Energy:  
End State Management Discussion (Continued) – Post-closure  
Options**

RSAL WORKING GROUP UPDATE  
OBJECTIVES

- INFORM FOCUS GROUP ABOUT WORKSHOP RESULTS
- GET FEEDBACK FROM FOCUS GROUP

TASK 1 PEER REVIEW  
OBJECTIVES

- HEAR AGENCY RESPONSIBILITIES TO PEER REVIEW
- HEAR KEY ISSUES/CHANGES IN REVISION
- DISCUSS REVISION
- GET "FINAL WORD" FROM FOCUS GROUP MEMBERS

END STATE - STEWARDSHIP  
OBJECTIVES

- INFORM FOCUS GROUP ABOUT STEWARDSHIP THINKING AND "BASELINE"
- IDENTIFY OPTIONS AND GET INITIAL FEEDBACK
- IDENTIFY ISSUES TO TRACK/DISCUSS

HEALTH EFFECTS WORKSHOP  
TOPICS

- RELATION OF RISK TO HEALTH EFFECTS
- WHAT ARE ALLOWABLE/ACCEPTABLE RISKS
- THE SCIENCE AND POLITICS OF DOSE MODELS (30 & 72)
- EPIDEMIOLOGY OF HEALTH EFFECTS

PRESENTERS: INFORMATION FROM TILL, HOFFMAN, BISTLINE, BNL

RSAL TASK 1  
QUESTIONS

- WHAT DOES "FORESEEABLE FUTURE" MEAN?

## RSAL's WorkGroup: Actions from 5/2 meeting

Action Item	Who	When	Notes
Check AOC area factor for calculations	Jim	5/16	
Figure area for each pathway & scenario for saturation	Jim	5/16	
Write up plan for path forward on gw pathway for Ur & Pu/Am	Steve	5/16	
Prepare separate table for Pu/Am & Ur	Mark	5/16	
Send out parameter definitions to gp	Mark	5/10	
Supplement parameter definitions with basis for specific values	Everyone	5/16	
Send out mass loading distribution to gp	Bob	5/10	
Send out Phil's spreadsheet	Mark	5/10	

### Agenda for 5/16 Meeting

Discuss/select not-so-sensitive parameter values from Mark's spreadsheet

Discuss mass loading status

Status of EPA's risk assessment

### Items covered on 5/3/01

Mass Loading

Approach to selecting not-so-sensitive parameter values

Ground water pathway



- ISN'T "RESIDENT RANCHER" THE MOST REASONABLE SCENARIO?

"REGULATORY" ISSUES REMAINING OPEN

- ALARA

- TIERS

## **Stakeholder Workshop – Outcomes and Issues**

### **Suggestions from the Panel of Experts**

#### **On Mass Loading:**

- **John Till:** It seems prudent to assume the probability of fire is 1 for compliance with an annual dose limit.
- **John Till:** It might be informative to perform an investigation similar to the wind tunnel studies on a larger scale in the natural environment.
- **Kathryn Higley:** The wind tunnel simulates resuspension due to horizontal movement, but the question of vertical-pounding, or turbulence, needs to be explored.
- **Art Rood:** Another source of information might be the dose reconstruction studies. Historical monitoring data is available for a time when the 903 Pad Area was burned.

#### **On How to Account for Changes in Dose Conversion Factors:**

- **Kathryn Higley:** Viewing dose conversion factors as probability distributions might result in greater stability over time.
- **John Till:** One solution might be to select the most conservative factor that has been proposed for each pathway. That could mean using an inhalation factor from ICRP 26 and a soil ingestion factor from ICRP 67, for instance.

#### **On Expertise in Using the Computer Model:**

- **Charley Yu:** It is imperative to understand how the model uses parameters in order run the model correctly. Even the best scientists can easily make mistakes.
- **John Till:** He has great concerns about the potential misuse of RESRAD.

**On Data Collection:**

- **John Till:** He stresses the importance of gathering site-specific data.
- **Charley Yu:** If you have uncertainty for some of the parameters, you need to collect better data to input to the code.

**On the Groundwater Pathway:**

- **John Till:** RESRAD cannot handle groundwater the way it should be handled. This issue needs to be given serious consideration.

## RFCA Stakeholder Focus Group Meeting Agenda

**When:** May 9, 2001 3:30 - 6:30 p.m.

**Where:** Broomfield Municipal Hall, Bal Swan and Zang's  
Spur Rooms

3:30-3:40 Agenda Review, 4/25/01 Meeting Minutes Review, Objectives  
for this Meeting

3:40-4:00 RSAL Working Group Update

4:00-4:20 RSAL Workshop – Outcomes and Issues

4:20-4:30 Health Effects Workshop Update

4:30-5:30 Task 4 – New Science

- Summary presentation
- Group discussion – what new science did we miss?
- Group discussion – what educational questions remain?
- Task 4 closure – Round Robin

5:30-5:40 Break

5:40-6:20 End State Management Discussion:

- Post Closure Options, Continued
- Identify specific issues / discussions to be addressed

6:20-6:30 Set Future Agendas and Review Meeting

6:30 Adjourn

# **RFCA Stakeholder Focus Group Meeting Agenda**



## **RFCA Stakeholder Focus Group Attachment A**

Title: Agenda for May 9, 2001 Focus Group Meeting

Date: May 8, 2001

Author: C. Reed Hodgins  
AlphaTRAC, Inc.

Phone Number: (303) 428-5670

Email Address: [cbennett@alphatrac.com](mailto:cbennett@alphatrac.com)

ADMIN RECORD

## **RFCA Stakeholder Focus Group Attachment C**

Title: RFCA Focus Group Path Forward

Date: May 8, 2001

Author: C. Reed Hodgins  
AlphaTRAC, Inc.

Phone Number: (303) 428-5670

Email Address: [cbennett@alphatrac.com](mailto:cbennett@alphatrac.com)

ADMIN RECORD

# DRAFT Focus Group Path Forward (through July, 2001)

## (Revised 5/03/01)

Meeting	Agenda
<b>May 9</b>	<ul style="list-style-type: none"> <li>• RSALs: New Science (Task 4) Focus Group Summary of Task 4 Issues</li> <li>• RSALs Workshop Outcomes and Issues</li> <li>• ER: Stewardship (Cont.)</li> </ul>
<b>May 23</b>	<ul style="list-style-type: none"> <li>• RSALs: Model Evaluation (Task 2) RFCA Parties' Responses to Peer Review Comments EPA RAGs modeling overview Focus Group Summary of Task 2 Issues</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>June 6</b>	<ul style="list-style-type: none"> <li>• RSALs: Multi-tier</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>June 20</b>	<ul style="list-style-type: none"> <li>• RSALs: Parameter Evaluation (Task 3) [soft schedule – will depend on completion of work]</li> <li>• RSALs: ALARA</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>July 11</b>	<ul style="list-style-type: none"> <li>• RSALs: Issue from RSALs Workshop / Science Review</li> <li>• RSALs: ALARA, Cont.</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>July 25</b>	<ul style="list-style-type: none"> <li>• RSALs: Parameter Evaluation (Task 3) RFCA Parties' Response to Peer Review Comments</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>

## RFCA Stakeholder Focus Group Attachment D

Title: Colorado State Bill SB01-145

Date: May 8, 2001

Supplied by: Dan Miller  
Natural Resources and Environment Section  
Colorado Department of Law

Phone Number: (303) 866-5014

Email Address: dan.miller@state.co.us

**NOTE:** Dan Miller emailed AlphaTRAC, Inc. the website (paper copy attached) of the State Bill with the following note:

“On April 20, Governor Owens signed SB01-145 into law. This bill, which was one of the top items on Attorney General Ken Salazar's legislative agenda, creates an ‘environmental covenant,’ an enforceable mechanism for implementing institutional controls imposed in connection with cleanups of contaminated sites. SB01-145 also contains several innovative provisions intended to address many of the inherent difficulties of implementing institutional controls. For example, the law provides for multiple enforcers, and allows the

state environmental regulatory agency to enforce local zoning ordinances under certain circumstances."

May 8, 2001

Dear Stakeholder:

The Rocky Flats Cleanup Agreement (RFCA) Stakeholder Focus Group will meet at the Broomfield Municipal Center at One DesCombes Drive on May 9, 2001 from 3:30 to 6:30 p.m.

The agenda for the May 9, 2001 meeting is enclosed (Attachment A). We will discuss the following topics:

- RSAL Working Group Workshop Update
- RSAL Workshop – Outcomes and Issues
- Health Effects Workshop Update
- RSALs Task 4 – New Science
- End State Management Discussion - Continued

The meeting minutes for the April 25, 2001 meeting are enclosed as Attachment B.

The RFCA Focus Group Agenda Setting Group held a conference call on May 3, 2001 to plan the path forward as requested at the April 25, 2001 RFCA Focus Group meeting. The revised path forward that resulted from the conference call is enclosed as Attachment C.

In the April 25, 2001 RFCA Focus Group meeting, Dan Miller of the Governor's office stated he would supply the Focus Group with the SB01-145 law signed by Governor Owens. A copy of the Bill is Attachment D.

If you need additional information to prepare you for the Focus Group discussion on May 9, 2001, please contact Christine Bennett of AlphaTRAC, Inc. at 303 428-5670 (cbennett@alphatrac.com). Christine will help to find the appropriate resource for you.

You may call either Christine or me if you have any questions, comments, or suggestions concerning the RFCA Stakeholder Focus Group or the upcoming meeting.

Sincerely,

C. Reed Hodgin, CCM  
Facilitator / Process Manager

Please:

1. Review and provide comments on this draft E Mail.
2. When final, send this E Mail to all RFCA stakeholders focus group members.

Subject:

At the \_\_\_\_\_(date) focus group meeting, the subject of a matrix was discussed. On the vertical axis of that matrix are described inputs; in this case, the inputs are remediation or clean up alternatives, such as a cap over areas, various cap alternatives, various alternatives to clean up industrial waste lines, a large impoundment on Walnut Creek west of Indiana Avenue, retain the A- and B-series impoundments, partially breach those impoundments and create wetlands and so forth. On the horizontal axis of the matrix are objectives or desired outcomes, specific desired outcomes reflecting increases in human health, the quality of the environment and achievement of ALARA, as low as reasonable achievable. In some situations, this relationship, this matrix would presented as both an environmental model as well as an economic model. That is, alternatives on the X-axis, would be funded and objectives on the Y-axis would be met, according to the model. Correspondingly, resources could be reallocated, funds reduced to a given alternative(s), funds increased to given alternative(s), with different results, desired objectives displayed on the Y-axis. However, it is the intent at this time to simply display the various reasonable, likely and appropriate remediation alternatives, rather than create a mathematical and economic model.

A committee will meet to:

1. If not brainstorm remediation alternatives, then to do a thorough job of listing all or most of the reasonable, likely and appropriate remediation alternatives to be applied at the RFETS.
2. Discuss the objectives or desired outcomes to be listed on the horizontal axis.

### 3. List those objectives.

That work product in draft, will be circulated to the larger focus group for consideration. The focus group may choose to adopt the draft, modify the draft or reject the draft in favor of a more appropriate way to display remediation alternatives.

### The Bottom Line

Some time back, it was suggested that the focus group, its individual members, consider trade-offs, consider how the relatively limited and static remediation funds be spent or allocated to the various reclamation alternatives. This will be one of possibly several ways to display those alternatives and desired outcomes; there may be other more appropriate ways, but this is one way.

If you would like to join this committee, please send an E Mail to Ken Brakken at [ken.brakken@rf.doe.gov](mailto:ken.brakken@rf.doe.gov) or call Ken at 303 966-3071 and note your availability on:

1. Friday, June 8, Noon to 4 PM;
2. Tuesday, June 12, AM; and
3. Wednesday, June 13, AM or PM.

Dependent on meeting room availability, this meeting will be held either in the CAB conference room or a meeting room in Building 060.



ubject:

FW: Committee being formed to prepare a draft matrix describing  
remediation

alternatives and desired environmental and health objectives

Date:

Tue, 05 Jun 2001 08:27:35 -0600

From:

"C. Reed Hodgkin" <rhodgin@wwc.com>

To:

Christine Bennett <cbennett@alphatrac.com>

Chris,

Please call me on cell to confirm your action on this.

Thanks,

Reed

----- Forwarded Message

From: Ken.Brakken@rf.doe.gov

Date: Mon, 4 Jun 2001 16:56:13 -0600

To: cbennett@alphatrac.com

Cc: Joe.Legare@rf.doe.gov, Jeremy.Karpatkin@rf.doe.gov,  
John.Rampe@rf.doe.gov, Robert\_Nininger.EXCHANGE@rf.doe.gov,  
nstenger@rfcab.org, Norma.Castaneda@rf.doe.gov,

Lane\_Butler.EXCHANGE@rf.doe.gov, rhodgin@alphatrac.com

Subject: Committee being formed to prepare a draft matrix describing  
remediation alternatives and desired environmental and health objectives

Christine:

RFCA STAKEHOLDER FOCUS GROUP  
AGENDA GROUP

May 3, 2001 2:00 – 3:00 pm

Via Teleconference

**AGENDA**

Review of Overall Path Forward

Agenda Setting for May – July – Major Topics

Detailed planning for May 9, 2001 Focus Group meeting:

- RSAL Working Group Update
- RSALs Task 4 Report - New Science
- End State Discussion – Stewardship, Cont.

For each topic, determine:

- Objectives
- Pre-meeting (packet) information needs (including action assignments)
- Presentations and discussions to be held (including action assignments)

Detailed planning for May 23, 2001 Focus Group meeting:

- RSAL Working Group Update
- RSALs Task 2 Report – Model Evaluation
  - Agencies Response to Peer Review
  - Focus Group Discussion and Summary of Issues
- RSAL Discussion – ALARA or Multi-tier

For each topic, determine:

- Objectives
- Pre-meeting (packet) information needs (including action assignments)
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alternatives and desired environmental and health objectives

Date:

Tue, 05 Jun 2001 08:27:35 -0600

From:

"C. Reed Hodgkin" <rhodgin@wwc.com>

To:

Christine Bennett <cbennett@alphatrac.com>

Chris,

Please call me on cell to confirm your action on this.

Thanks,

Reed

----- Forwarded Message

From: Ken.Brakken@rf.doe.gov

Date: Mon, 4 Jun 2001 16:56:13 -0600

To: cbennett@alphatrac.com

Cc: Joe.Legare@rf.doe.gov, Jeremy.Karpatkin@rf.doe.gov,  
John.Rampe@rf.doe.gov, Robert\_Nininger.EXCHANGE@rf.doe.gov,  
nstenger@rfcab.org, Norma.Castaneda@rf.doe.gov,

Lane\_Butler.EXCHANGE@rf.doe.gov, rhodgin@alphatrac.com

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May 8, 2001

Dear Stakeholder:

The Rocky Flats Cleanup Agreement (RFCA) Stakeholder Focus Group will meet at the Broomfield Municipal Center at One DesCombes Drive on May 9, 2001 from 3:30 to 6:30 p.m.

The agenda for the May 9, 2001 meeting is enclosed (Attachment A). We will discuss the following topics:

- RSAL Working Group Workshop Update
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- End State Management Discussion - Continued

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If you need additional information to prepare you for the Focus Group discussion on May 9, 2001, please contact Christine Bennett of AlphaTRAC, Inc. at 303 428-5670 (cbennett@alphatrac.com). Christine will help to find the appropriate resource for you.

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Sincerely,

C. Reed Hodgin, CCM  
Facilitator / Process Manager



RFCA STAKEHOLDER FOCUS GROUP  
AGENDA GROUP

May 3, 2001 2:00 – 3:00 pm

Via Teleconference

**AGENDA**

Review of Overall Path Forward

Agenda Setting for May – July – Major Topics

Detailed planning for May 9, 2001 Focus Group meeting:

- RSAL Working Group Update
- RSALs Task 4 Report - New Science
- End State Discussion – Stewardship, Cont.

For each topic, determine:

- Objectives
- Pre-meeting (packet) information needs (including action assignments)
- Presentations and discussions to be held (including action assignments)

Detailed planning for May 23, 2001 Focus Group meeting:

- RSAL Working Group Update
- RSALs Task 2 Report – Model Evaluation
  - Agencies Response to Peer Review
  - Focus Group Discussion and Summary of Issues
- RSAL Discussion – ALARA or Multi-tier

For each topic, determine:

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## **RFCA Stakeholder Focus Group Attachment A**

Title: Agenda for May 9, 2001 Focus Group Meeting

Date: May 8, 2001

Author: C. Reed Hodgins  
AlphaTRAC, Inc.

Phone Number: (303) 428-5670

Email Address: [cbennett@alphatrac.com](mailto:cbennett@alphatrac.com)

## **RFCA Stakeholder Focus Group Attachment C**

Title: RFCA Focus Group Path Forward

Date: May 8, 2001

Author: C. Reed Hodgins  
AlphaTRAC, Inc.

Phone Number: (303) 428-5670

Email Address: [cbennett@alphatrac.com](mailto:cbennett@alphatrac.com)

# DRAFT Focus Group Path Forward (through July, 2001)

## (Revised 5/03/01)

Meeting	Agenda
<b>May 9</b>	<ul style="list-style-type: none"> <li>• RSALs: New Science (Task 4) Focus Group Summary of Task 4 Issues</li> <li>• RSALs Workshop Outcomes and Issues</li> <li>• ER: Stewardship (Cont.)</li> </ul>
<b>May 23</b>	<ul style="list-style-type: none"> <li>• RSALs: Model Evaluation (Task 2) RFCA Parties' Responses to Peer Review Comments EPA RAGs modeling overview Focus Group Summary of Task 2 Issues</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>June 6</b>	<ul style="list-style-type: none"> <li>• RSALs: Multi-tier</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>June 20</b>	<ul style="list-style-type: none"> <li>• RSALs: Parameter Evaluation (Task 3) [soft schedule – will depend on completion of work]</li> <li>• RSALs: ALARA</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>July 11</b>	<ul style="list-style-type: none"> <li>• RSALs: Issue from RSALs Workshop / Science Review</li> <li>• RSALs: ALARA, Cont.</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>
<b>July 25</b>	<ul style="list-style-type: none"> <li>• RSALs: Parameter Evaluation (Task 3) RFCA Parties' Response to Peer Review Comments</li> <li>• ER: TBD in 5/9/01 Discussion</li> </ul>

## RFCA Stakeholder Focus Group Attachment D

Title: Colorado State Bill SB01-145

Date: May 8, 2001

Supplied by: Dan Miller  
Natural Resources and Environment Section  
Colorado Department of Law

Phone Number: (303) 866-5014

Email Address: dan.miller@state.co.us

**NOTE:** Dan Miller emailed AlphaTRAC, Inc. the website (paper copy attached) of the State Bill with the following note:

“On April 20, Governor Owens signed SB01-145 into law. This bill, which was one of the top items on Attorney General Ken Salazar's legislative agenda, creates an ‘environmental covenant,’ an enforceable mechanism for implementing institutional controls imposed in connection with cleanups of contaminated sites. SB01-145 also contains several innovative provisions intended to address many of the inherent difficulties of implementing institutional controls. For example, the law provides for multiple enforcers, and allows the

state environmental regulatory agency to enforce local zoning ordinances under certain circumstances."

ubject:

FW: Committee being formed to prepare a draft matrix describing  
remediation

alternatives and desired environmental and health objectives

Date:

Tue, 05 Jun 2001 08:27:35 -0600

From:

"C. Reed Hodgins" <rhodgin@wwc.com>

To:

Christine Bennett <cbennett@alphatrac.com>

Chris,

Please call me on cell to confirm your action on this.

Thanks,

Reed

----- Forwarded Message

From: Ken.Brakken@rf.doe.gov

Date: Mon, 4 Jun 2001 16:56:13 -0600

To: cbennett@alphatrac.com

Cc: Joe.Legare@rf.doe.gov, Jeremy.Karpatkin@rf.doe.gov,  
John.Rampe@rf.doe.gov, Robert\_Nininger.EXCHANGE@rf.doe.gov,  
nstenger@rfcab.org, Norma.Castaneda@rf.doe.gov,  
Lane\_Butler.EXCHANGE@rf.doe.gov, rhodgin@alphatrac.com

Subject: Committee being formed to prepare a draft matrix describing  
remediation alternatives and desired environmental and health objectives

Christine:

Please:

1. Review and provide comments on this draft E Mail.
2. When final, send this E Mail to all RFCA stakeholders focus group members.

Subject:

At the \_\_\_\_\_(date) focus group meeting, the subject of a matrix was discussed. On the vertical axis of that matrix are described inputs; in this case, the inputs are remediation or clean up alternatives, such as a cap over areas, various cap alternatives, various alternatives to clean up industrial waste lines, a large impoundment on Walnut Creek west of Indiana Avenue, retain the A- and B-series impoundments, partially breach those impoundments and create wetlands and so forth. On the horizontal axis of the matrix are objectives or desired outcomes, specific desired outcomes reflecting increases in human health, the quality of the environment and achievement of ALARA, as low as reasonable achievable. In some situations, this relationship, this matrix would presented as both an environmental model as well as an economic model. That is, alternatives on the X-axis, would be funded and objectives on the Y-axis would be met, according to the model. Correspondingly, resources could be reallocated, funds reduced to a given alternative(s), funds increased to given alternative(s), with different results, desired objectives displayed on the Y-axis. However, it is the intent at this time to simply display the various reasonable, likely and appropriate remediation alternatives, rather than create a mathematical and economic model.

A committee will meet to:

1. If not brainstorm remediation alternatives, then to do a thorough job of listing all or most of the reasonable, likely and appropriate remediation alternatives to be applied at the RFETS.
2. Discuss the objectives or desired outcomes to be listed on the horizontal axis.



### 3. List those objectives.

That work product in draft, will be circulated to the larger focus group for consideration. The focus group may choose to adopt the draft, modify the draft or reject the draft in favor of a more appropriate way to display remediation alternatives.

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